We Claim:

1. A method for adjusting a substrate in an exposure appliance used for transferring a structure to the substrate, the appliance including a moving chuck for aligning the substrate, a radiation source, and at least one focusing device, the method which comprises:

for at least one first position on the chuck, obtaining a measured discrepancy by measuring any discrepancy between a surface of the chuck and an idealized plane;

providing the substrate, which is covered with a photosensitive layer;

fixing the substrate on the chuck such that the surface of the chuck faces and the substrate and the chuck contacts the substrate;

selecting a first detail from a plurality of details in the photosensitive layer, the first detail representing a first exposure area on the substrate, the selecting step including defining a projected first position by projecting the first position on the chuck into the photosensitive layer and selecting the first detail such that the projected first position is located within or near the first detail;

obtaining a predetermined focus distance by predetermining a common focus distance intended for the plurality of details on the substrate;

calculating a first correction for the predetermined focus distance between the first detail on the substrate and the focusing device as a function of the measured discrepancy at the first position; and

applying the first correction to the focus distance by moving the chuck for adjusting the substrate in an exposure step for the first exposure area.

2. The method according to claim 1, which further comprises:

measuring discrepancies for at least one second position on the chuck;

selecting a second detail on the substrate, the selecting step including defining a projected second position by projecting the second position on the chuck into the photosensitive layer and selecting the second detail such that the projected second position is located within or near the second detail;

calculating a second correction for the predetermined focus distance as a function of the measured discrepancies at the second position; and

for adjusting the substrate in a further exposure step, repeatedly applying the second correction for a second exposure area, the first correction and the second correction being different.

3. The method according to claim 1, wherein the first correction includes compensating for any tilt that is measured from the measured discrepancy at two or more first positions.

4. The method according to claim 3, wherein the second correction includes compensating for any tilt that is measured from the measured discrepancy at the two or more first positions.

5. The method according to claim 1, which further comprises:

individually repeating steps for adjusting the focus distance for all of the plurality of details in the photosensitive layer on the substrate, each of the plurality of details representing an exposure area for carrying out an exposure step.

6. The method according to claim 1, which further comprises:

storing a plurality of measured discrepancies in a databank; and

calculating corrections to a plurality of focus distances and tilts in the plurality of details for a plurality of substrates as a function of the plurality of measured discrepancies at each position associated with the plurality of details.

7. The method according to claim 1, which further comprises performing the step of measuring any discrepancy between the surface of the chuck and the idealized plane by using at least one focus/tilt sensor in an exposure appliance.

8. The method according to claim 1, which further comprises performing the step of measuring any discrepancy between the surface of the chuck and the idealized plane indirectly by measuring discrepancies between a surface of a highly planar test substrate and an idealized plane.

9. The method according to claim 1, which comprises calculating the common focus distance from an average of a plurality of measured focus distances in the plurality of

details, each of the plurality of measured focus distances being ideal for exposure.

10. The method according to claim 1, which comprises calculating a common tilt from an average of a plurality of measured tilts in the plurality of details, each of the plurality of tilts being ideal for exposure.

11. A method for adjusting a substrate in an exposure appliance used for transferring a structure to the substrate, the appliance including a moving chuck for aligning the substrate, a radiation source, and at least one focusing device, the method which comprises:

for at least one first position on the chuck, obtaining a measured discrepancy by measuring any discrepancy between a surface of the chuck and an idealized plane;

providing the substrate, which is covered with a photosensitive layer, on the chuck such that the surface of the chuck faces the substrate;

selecting a first detail from a plurality of details provided for measuring an ideal focus distance in the photosensitive layer, the first detail representing a first exposure area on the substrate, the selecting step including defining a

projected first position by projecting the first position on the chuck into the photosensitive layer and selecting the first detail such that the projected first position is located within or near the first detail;

setting a predetermined limit value for a permissible discrepancy;

comparing the measured discrepancy with the predetermined limit value;

as a function of the comparing step, excluding a detail from the plurality of details provided for measuring the ideal focus distance in the photosensitive layer;

obtaining a measured ideal focus distance by measuring a focus distance being ideal for exposure in at least one further detail from the plurality of details; and

moving the chuck to adjust the substrate to the measured ideal focus distance for illuminating the first exposure area.

12. A method for adjusting a substrate in an exposure appliance used for transferring a structure to the substrate, the appliance including a moving chuck for aligning the

substrate, a radiation source, and at least one focusing device, the method which comprises:

for at least one first position on the chuck, obtaining a measured discrepancy by measuring any discrepancy between a surface of the chuck and an idealized plane;

providing the substrate, which is covered with a photosensitive layer, on the chuck such that the surface of the chuck faces the substrate;

selecting a first detail including at least one first adjustment mark from a plurality of details in the photosensitive layer, the first detail representing a first exposure area on the substrate, the selecting step including defining a projected first position by projecting the first position on the chuck into the photosensitive layer and selecting the first detail such that the projected first position is located within or near the first detail;

setting a predetermined limit value for a permissible discrepancy;

comparing the measured discrepancy with the predetermined limit value;

as a function of the comparing step, not considering the adjustment mark in the first detail; and

based on at least one further adjustment mark, moving the chuck to adjust the substrate in a direction at right angles to a direction of a focus distance for illuminating the first exposure area.